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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,850

Applicant(s)

RYAN, NICHOLAS M.

Examiner

YOGESH PALIWAL

Art Unit

2435

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/29/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 26-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- Applicant's amendment filed on 9/29/2009 has been entered. Applicant did not make any claims amendments. Currently claims 1-22 and 26-31 are pending in this application.

Response to Arguments

1. Applicant's arguments filed 9/29/2009 have been fully considered but they are not persuasive for following reasons:

- With respect to 35 U.S.C. 101 rejection of claims 26-31, applicant argues that, "The Examiner has rejected claims 26-31 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicant notes that each of independent claims 26 and 29-31 recites "a **tangible** computer-readable medium," which excludes the subject matter which is alleged by the Examiner to be non-statutory. It is important that "when evaluating the scope of a claim, **every limitation in the claim must be considered.**" (M.P.E.P. § 2106). The plain meaning of the term "tangible" excludes "carrier waves," and this term must be considered by the Examiner."
- In reply, examiner would like to point out that signals or carrier waves are not considered to not be statutory not because they are not tangible, but because as currently defined by the courts, signals do not fall within any of the four statutory categories of invention. One can easily prove that signals are in fact tangible by sticking a paperclip into a live wall outlet. If signals were not

tangible, one would not feel the resulting electric shock. Therefore, the word tangible does not exclude signal or carrier waves. Computer readable medium which are transitory does not fall within any of the four statutory categories regardless of the medium being tangible or not (see, new interim patent subject matter eligibility examination instructions, August 24, 2009).

- Applicant argues that, "Under the Examiner's interpretation, it is impossible for Richards to teach or suggest, "wherein **the header includes the document key and access rules** for the secured electronic file, the access rules for further **protecting the document key**," as recited in claim 1. Although the "E_Key" of Richards can be found in the header, even assuming, arguendo, that it functions as a document key, the "server keyed" element of Richards is not "for further protecting the document key," as recited in claim 1. Instead, Richards uses the "server keyed" element to require authentication, at which point a "required key will be **provided by the secure server**." Clearly this is not the same key which is found in the header of Richards, and therefore cannot be the "document key" of claim 1."
- Examiner respectfully disagrees and would like to point out at paragraph 0023 which recites, "The method includes the steps of: authenticating a user, **encrypting of data with a security key**, generating a **dynamic key on a secure server and transferring the dynamic key** to a recipient device, and decrypting the data by the **security key based on the dynamic key transferred** with the data or transferred independently of the data." and

further paragraph 0067 which recites, "**encryption/security key for accessing the database and other encrypted file data** is incorporated into one of **the elements of the header component 112.**" Therefore as pointed out database and other encrypted file data is encrypted with security key which is located into the header component 112 (see, Fig. 4 and paragraph 0067). Therefore, Richards explicitly discloses "wherein the header includes the document key". Furthermore header includes access rules (see, Paragraph 0068, "policy component" including server keyed. As pointed out by paragraph 0023, generation of security key requires a dynamic key provided by the server (see, Paragraph 0023, "decrypting the data by the security key based on the dynamic key transferred with the data or transferred independently of the data"). The "server keyed" element requires the recipient to authenticate itself (see, Paragraph 0068) to the server to get the required key (dynamic key as taught by paragraph 0023). Since the server keyed are used to get the dynamic key which eventually is used to get security key, examiner is interpreting the "server keyed" element as access rules for protecting the document key (security key) because only when user uses server keyed to request dynamic key, user can get access to the security key. Therefore, "server keyed" element indeed protects the document key (security key) as a result rejection is maintained.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 26-31 are rejected under 35 U.S.C. 101 because

Claim(s) 26-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 26-31 are drawn to functional descriptive material recorded on a tangible computer-readable medium. Normally, the claim would be statutory. However, the specification, at paragraph 0064 defines the claimed tangible computer readable medium as encompassing statutory media such as a "ROM", "hard drive", "optical drive", etc, as well as ***non-statutory*** subject mater such as a "carrier waves".

A "signal" embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory. Any amendment to the claim should be commensurate with its corresponding disclosure. Also note that signals or carrier waves are not considered to not be statutory not because they are not tangible, but because as currently defined by the courts, signals do not fall within any of the four statutory categories of invention. One can easily prove that signals are in fact tangible by sticking a paperclip into a live wall outlet. If signals were not tangible, one would not feel the resulting electric shock. Therefore, the word tangible does not exclude signal or carrier waves. Computer readable medium which

are transitory does not fall within any of the four statutory categories regardless of the medium being tangible or not (see, new interim patent subject matter eligibility examination instructions, August 24, 2009).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baltzley (US 6,292,895 B1), hereinafter "Baltzley" in view of Angelo et al. (US 5,923,754), hereinafter, "Angelo", and Batten-Carew et al. (US 6,603,857 B1), hereinafter "Batten-Carew" and further in view of Richards et al. (US 2002/0016922 A1), hereinafter "Richards".

Regarding **Claim 1**, Baltzley discloses a file security system for restricting access to electronic files, said file security system comprising:

a key store configured to store a plurality of cryptographic key pairs, each of the plurality of cryptographic key pairs including a public key and a private key (see, Fig. 2, Numerals 320, and 325).

an access manager (see Fig. 3, Numeral 220) operatively connected to said key store, configured to determine whether the private key of at least one of the

cryptographic key pairs is permitted to be provided to a requester (see Column 2, lines 41-52 and also Column 5 lines 2-10).

wherein the requester requires the private key to access a secured electronic file (see Column 2, lines 51-52), and wherein the secured electronic file was previously secured using the public key of the at least one of the cryptographic key pairs (See Column 2, lines 55-56).

Baltzley directly encrypt the electronic file using the public key and therefore does not teach that a data portion of the secured electronic file was previously secured using a document key and wherein the document key was previously secured by the public key of the cryptographic key pair.

However, hybrid encryption was well-known at the time invention was made. Angelo discloses encrypting the message using a document key and the encrypting the document key using a public key (see, Column 3, lines 13-22).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use, instead of public key directly encrypting the documents in the system of Baltzley, the technique of hybrid encryption as taught by Angelo because encrypting the message with the symmetric algorithm is faster then asymmetric algorithm and using public key just to encrypt the document key reduces the chances for plaintext attacks. In other words, hybrid encryption provides the security of public-key encryption at the same time processing messages faster then asymmetric encryption by using symmetric key for data encryption.

Baltzley does not disclose a cryptographic key that pertains to a predetermined time.

Batten-Carew discloses a method and apparatus for controlling release of time-sensitive information is accomplished by a server that establishes access information for a specific future time as passed (abstract). The method includes at least one of the cryptographic key pairs pertaining to a predetermined time (column 3 lines 40-47); key pairs pertaining to the predetermined time is permitted to be provided to a requester based on a current time (Fig. 3), wherein the requester requires the private key of the at least one of the cryptographic key pairs pertaining to the predetermined time to access a secured electronic file (column 3 lines 48-55), and wherein the secured electronic file was previously secured using the public key of the at least one of the cryptographic key pairs pertaining to the predetermined time (Fig. 1).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the time-based key of Batten-Carew in the system of Baltzley. One of ordinary skill in the art would have been motivated to do this because the method of Batten-Carew would allow time-sensitive information to be released at any time and accessed only at a specific future time based on the release of access information relating to the specific future time (column 2 lines 29-33).

The combination of Baltzley, Angelo, and Batten-Carew discloses encrypting the document with a document key and encrypting the document key with the public key of at least one of the cryptographic key pairs pertaining to the predetermined time. However, the combination does not explicitly disclose header including the document

key and access rules for the secured electronic file, the access rules for further protecting the document key.

However, Richards discloses header with document key (security key) and access rules (see, Fig. 4 and also paragraphs 0023, 0067), the access rules for further protecting the document key (see, Paragraph 0068, "The "server keyed" element requires the recipient to authenticate itself to the server and request opening of a file. A required key will be provided by the secure server" and also paragraph 0023, "The method includes the steps of: authenticating a user, **encrypting of data with a security key**, generating a **dynamic key on a secure server and transferring the dynamic key** to a recipient device, and decrypting the data by the **security key based on the dynamic key transferred** with the data or transferred independently of the data.", please refer to "response to argument" section for detailed explanation).

Therefore, it would have been obvious at the time invention was made to a person of ordinary skill in the art to place the document key of the combined system of Baltzley, Angelo, and Batten-Carew and further append access rules as taught by Richards with document key into the header because "all encoded header data, database, and any other data are encoded as a single data file or stream being singular in type, the data may be checked by the application before opening via the various embedded hash elements. Accordingly, the security and integrity of the data is further maintained, firewall requirements are simplified, and the potential of firewall penetration is reduced" (see, Paragraph 0073).

Regarding **Claim 2**, the rejection of claim 1 is incorporated and Baltzley does not teach an access manager is configured to provide the private key of the at least one of the cryptographic key pairs pertaining to the predetermined time to the requester if the predetermined time is greater than or equal to the current time.

Batten-Carew discloses a system, wherein said access manager only provides the private key of the at least one of the cryptographic key pairs pertaining to the predetermined time to the requester if the predetermined time is greater than or equal to the Current time (Fig. 3).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the time-based key of Batten-Carew in the system of Baltzley. One of ordinary skill in the art would have been motivated to do this because the method of Batten- Carew would allow time-sensitive information to be released at any time and accessed only at a specific future time based on the release of access information relating to the specific future time (column 2 lines 29-33).

Regarding **Claim 3**, the rejection of claim 1 is incorporated and Baltzley further discloses wherein the requester is a client module that operatively connects to said access manager over a network (see Figs. 3 and 4).

Regarding **Claim 4**, the rejection of claim 1 is incorporated and Baltzley does not discloses a system wherein said document security system further comprises: at least one client module, said client module assists a user in selecting the predetermined time, and said client module secures the electronic file using the public key of the at least one

of the cryptographic key pairs pertaining to the predetermined time so as to provide a time-based access restriction to the electronic file.

Batten-Carew discloses a system wherein a document security system further comprises: at least one client module, said client module configured to select the predetermined time and secure the electronic file using the public key of the at least one of the cryptographic key pairs pertaining to the predetermined time so as to provide a time-based access restriction to the electronic file (Fig. 4).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the time-based key of Batten-Carew in the system of Baltzley. One of ordinary skill in the art would have been motivated to do this because the method of Batten-Carew would allow time-sensitive information to be released at any time and accessed only at a specific future time based on the release of access information relating to the specific future time (column 2 lines 29-33).

Regarding **Claim 5**, the rejection of claim 4 is incorporated and Baltzley does not disclose wherein said client module further assists in unsecuring the secured electronic file by acquiring the private key of the at least one of the cryptographic key pairs that pertaining to the predetermined time from said key store, and then unsecure the secured electronic file using the private key that pertaining to the predetermined time

Batten-Carew discloses a system wherein said client module further assists in unsecuring the secured electronic file by acquiring the private key of the at least one of the cryptographic key pairs that pertaining to the predetermined time from said key store, and then unsecuring the secured electronic file using the private key of the at

least one of the cryptographic key pairs that pertaining to the predetermined time (Fig. 3 and Fig. 4).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the time-based key of Batten-Carew in the system of Baltzley. One of ordinary skill in the art would have been motivated to do this because the method of Batten- Carew would allow time-sensitive information to be released at any time and accessed only at a specific future time based on the release of access information relating to the specific future time (column 2 lines 29-33).

Claims 6-9 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over En-Seung et al.(US 6,892,306 B1), hereinafter, "En-Seung" in view of Richards and Batten-Carew and further in view of Singhal et al. (US 6,851,050 B2), hereinafter "Singhal".

Regarding **Claims 6, 26 and 29**, En-Seung discloses an apparatus, a corresponding method and a corresponding computer program for controlling release of time-sensitive information, said method comprising:

Identifying an electronic document to be secured, the electronic document having at least a data portion that contains data (see, Column 5, lines 57-61);

generating a access key (see Column 9, lines 9-11);

securing the data portion of the electronic document through use a document key to produce a secured electronic document (see Column 3, lines 14-22 and see Figs. 10 and also Column 5, lines 19-27);

storing the document key in the header portion of the electronic document (see, Column 5, lines 6-8);

securing the header portion of the electronic document through the use of the user key (see, Column 5, lines 6-8)

storing the secured electronic document (see Column 6, lines 54-59).

En-Seung discloses a header portion containing the document key but does not explicitly disclose that the header portion also includes access rules for the electronic document and wherein the access rules are provided for further protecting the document key.

However, Richards discloses header with document key (security key) and access rules (see, Fig. 4 and also 0067), the access rules for further protecting the document key (see, Paragraph 0068, "The "server keyed" element requires the recipient to authenticate itself to the server and request opening of a file. A required key will be provided by the secure server" and also paragraph 0023, "The method includes the steps of: authenticating a user, **encrypting of data with a security key**, generating a **dynamic key on a secure server and transferring the dynamic key** to a recipient device, and decrypting the data by the **security key based on the dynamic key transferred** with the data or transferred independently of the data.", please refer to "response to argument" section for detailed explanation).

Therefore, it would have been obvious at the time invention was made to a person of ordinary skill in the art to place the document key of the combined system of Baltzley, Angelo, and Batten-Carew and further append access rules as taught by

Richards with document key into the header because "all encoded header data, database, and any other data are encoded as a single data file or stream being singular in type, the data may be checked by the application before opening via the various embedded hash elements. Accordingly, the security and integrity of the data is further maintained, firewall requirements are simplified, and the potential of firewall penetration is reduced" (see, Paragraph 0073).

The combination of En-Seung and Richards discloses user key that encrypt document key and document key in the header that encrypts the contents. However, En-Seung does not explicitly disclose that the user key is a time-based access key.

Batten-Carew discloses a method and apparatus for controlling release of time-sensitive information is accomplished by a server that establishes access information for a specific future time as passed (abstract). Batten-Carew discloses using time-based access key for the predetermined time (Column 3, lines 34-40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the time-based key of Batten-Carew in the combined system of En-Seung and Richards. One of ordinary skill in the art would have been motivated to do this because the method of Batten-Carew would allow time-sensitive information to be released at any time and accessed only at a specific future time based on the release of access information relating to the specific future time (column 2 lines 29-33).

Even though the combination of En-Seung, Richards and Batten-Carew discloses generating time-based access key for a predetermined time it does not

explicitly discloses a step of determining whether a time-based access key is already available for a predetermined time, otherwise generating a time-based access key for the predetermined time. Batten-Carew is just missing the step of checking to see if the time-based access key is already generated and only generate new time-based access key if one does not exist.

Singhal discloses a condition where prior to generating a key, system check to see the key is already generated and only generates a new key if one does not exist (see Column 18, lines 30-60).

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to generate, the time-based access key of the combined system of En-Seung, Richards and Batten-Carew, only if the key doesn't already exist. One of ordinary skill in the art would have been motivated to check this condition prior to generating new time-based access key in a case where sender is sending more than one document and all document are suppose to release on the same time. In such a condition it would be appropriate to simply use the same time-based access key rather than generating multiple time-based access keys for the same predetermined time.

Regarding **Claims 7 and 27**, Batten-Carew discloses a method wherein the time-based access key has an access time associated therewith (column 3 lines 4-23').

Regarding **Claims 8 and 28**, Batten-Carew discloses a method wherein said method further comprises: storing the time-based access key at a remote key store, and wherein the time-based access key is subsequently retrievable from the remote key

store only if the current time equals or exceeds the access time associated with the time-based access key (Fig. 1 and Fig. 3).

Regarding **Claim 9**, Batten-Carew discloses a method wherein said method is performed on a client machine that operatively receives the time-based access key from the remote key store over a network (Fig. 1 and column 3 lines 32-35).

Claims 10-22 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over En-Seung in view Richards and further in view of Batten-Carew.

Regarding **Claims 10 and 30**, En-Seung et al. (US 6,892,306 B1) discloses a method and a corresponding computer program for restricting access to an electronic document, said method comprising:

Identifying an electronic document (digital information) to be secured, the electronic document to be secured, the electronic document having at least a data portion that contains data (Column 5, lines 57-61);

obtaining a document key (See Column 3, lines 25-28, "temporary validation key");

encrypting the data portion of the electronic document using the document key to produce an encrypted data portion (see Column 3, lines 25-28);

obtaining an access key (See Column 3, lines 14-22, user key);

storing the access key in the header portion (see, Column 5, lines 6-8);

encrypting the document key using an access key to produce an encrypted document key (see Column 3, lines 14-22, temporary validation key in the header is encrypted using user key);

storing the encrypted document key in the header portion (see, Column 5, lines 6-8);

forming a secured electronic document from at least the encrypted data portion and the header (see Figs. 10 and also Column 5, lines 6-8).

storing the secured electronic document (see Column 6, lines 54-59)

En-Seung discloses a header portion containing the document key but does not explicitly disclose that the header portion also includes access rules for the electronic document and wherein the access rules are provided for further protecting the document key.

However, Richards discloses header with document key (security key) and access rules (see, Fig. 4 and also 0067, 0023), the access rules for further protecting the document key (see, Paragraph 0068, "The "server keyed" element requires the recipient to authenticate itself to the server and request opening of a file. A required key will be provided by the secure server" and also paragraph 0023, "The method includes the steps of: authenticating a user, encrypting of data with a security key, generating a dynamic key on a secure server and transferring the dynamic key to a recipient device, and decrypting the data by the security key based on the dynamic key transferred with the data or transferred independently of the data.", please refer to "response to argument" section for detailed explanation).

Therefore, it would have been obvious at the time invention was made to a person of ordinary skill in the art to place the document key of the combined system of Baltzley, Angelo, and Batten-Carew and further append access rules as taught by Richards with document key into the header because "all encoded header data, database, and any other data are encoded as a single data file or stream being singular in type, the data may be checked by the application before opening via the various embedded hash elements. Accordingly, the security and integrity of the data is further maintained, firewall requirements are simplified, and the potential of firewall penetration is reduced" (see, Paragraph 0073).

The combination of En-Seung and Richards discloses user key that encrypt document key and document key that encrypts the contents. However, En-Seung does not explicitly disclose that the user key is a time-based access key.

Batten-Carew discloses a method and apparatus for controlling release of time-sensitive information is accomplished by a server that establishes access information for a specific future time as passed (abstract). Batten-Carew discloses using time-based access key (Column 3, lines 34-40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the time-based key of Batten-Carew in the combined system of En-Seung and Richards. One of ordinary skill in the art would have been motivated to do this because the method of Batten-Carew would allow time-sensitive information to be released at any time and accessed only at a specific future time based

on the release of access information relating to the specific future time (column 2 lines 29-33).

Regarding **Claim 11**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein the time-based access key is a public time-based access key (see Batten-Carew, Column 3, lines 48-64)

Regarding **Claim 12**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein the time-based access key has an access time associated therewith (see Batten-Carew, column 3 lines 4-23 and Fig. 2)

Regarding **Claim 13**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein the time-based access key is available from a remote key store when the current time is equal to or greater than the access time associated with the time-based access key (see Batten-Carew, Fig. 3).

Regarding **Claim 14**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein the access time is a day of a year and the time-based access keys are unique for each day of the year (see Batten-Carew, Fig. 2).

Regarding **Claim 15**, the combination of En-Seung, Richards and Batten-Carew further discloses further discloses wherein said method is performed on a client machine that operatively receives the time-based access key from the remote key store over a network (see Batten-Carew, Fig. 1 and Column 3 lines 32-35).

Claims 16-22 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over En-Seung and Richards in view of Batten-Carew.

Regarding **Claims 16 and 31**, En-Seung discloses a method and a corresponding computer program for accessing a secured electronic document by a requester, the secured electronic document having at least a header portion, having an encrypted document key and access rules, and an encrypted data portion (see, Fig. 10), said method comprising:

obtaining an access key (See Fig. 21A, Numeral S430, and also Column 3, lines 14-22, user key);

decrypting the document key using the time-based access key (see, Column 15, lines 63-67);

En-Seung discloses a header portion containing the document key but does not explicitly disclose that the header portion also includes access rules for the electronic document and wherein the access rules are provided for further protecting the document key.

However, Richards discloses header with document key (security key) and access rules (see, Fig. 4 and also paragraphs 0067, 0023), the access rules for further protecting the document key (see, Paragraph 0068, "The "server keyed" element requires the recipient to authenticate itself to the server and request opening of a file. A required key will be provided by the secure server" and also paragraph 0023, "The method includes the steps of: authenticating a user, encrypting of data with a security key, generating a dynamic key on a secure server and transferring the dynamic key to a recipient device, and decrypting the data by the security key based on the dynamic key

transferred with the data or transferred independently of the data.”, please refer to “response to argument” section for detailed explanation).

Therefore, it would have been obvious at the time invention was made to a person of ordinary skill in the art to place the document key of the combined system of Baltzley, Angelo, and Batten-Carew and further append access rules as taught by Richards with document key into the header because “all encoded header data, database, and any other data are encoded as a single data file or stream being singular in type, the data may be checked by the application before opening via the various embedded hash elements. Accordingly, the security and integrity of the data is further maintained, firewall requirements are simplified, and the potential of firewall penetration is reduced” (see, Paragraph 0073).

The combination of En-Seung and Richards further discloses:

decrypting an encrypted data portion of the secured electronic document using the document key to produce a non-encrypted data portion (see, Column 16, lines 10-14); and

supplying the non-encrypted data portion to the requester (see, Fig. 21B, Numeral S470).

The combination of En-Seung and Richards discloses user key that encrypt document key and document key that encrypts the contents. However, En-Seung does not explicitly disclose that the user key is a time-based access key.

Batten-Carew discloses a method and apparatus for controlling release of time-sensitive information is accomplished by a server that establishes access information

for a specific future time as passed (abstract). Batten-Carew discloses using time-based access key (Column 3, lines 34-40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the time-based key of Batten-Carew in the combined system of En-Seung and Richards. One of ordinary skill in the art would have been motivated to do this because the method of Batten-Carew would allow time-sensitive information to be released at any time and accessed only at a specific future time based on the release of access information relating to the specific future time (column 2 lines 29-33).

Regarding **Claim 17**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein the time-based access key is identified by an indicator within a header portion of the secured electronic document (see, En-Seung Column 15, lines 35-51 as modified by Batten-Carew).

Regarding **Claim 18**, the combination of En-Seung, Richards and Batten-Carew further discloses using a private time-based access key (see Batten-Carew, Column 3, lines 48-64).

Regarding **Claim 19**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein the time-based access key is acquired from a server (see Batten-Carew, Fig. 1 and Column 3 lines 32-35).

Regarding **Claim 20**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein said obtaining of the time-based access key is dependent on the current time (see Batten-Carew, column 3 lines 4-23 and Fig. 2).

Regarding **Claim 21**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein the time-based access key is associated with an access time, and wherein said obtaining of the time-based access key is permitted when the current time is greater than or equal to the access time (see Batten-Carew, Fig. 3).

Regarding **Claim 22**, the combination of En-Seung, Richards and Batten-Carew further discloses wherein, if permitted, during said obtaining step the time-based access key is obtained from a server (see Batten-Carew, Fig. 1 and Column 3 lines 32-35).

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOGESH PALIWAL whose telephone number is

(571)270-1807. The examiner can normally be reached on M-F: 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. P./
Examiner, Art Unit 2435

/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435